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(54) SLOSHING PRESSURE RELAXATION STRUCTURE

(57)Abstract:

PROBLEM TO BE SOLVED: To relax sloshing pressure generated by the movement of a liquid in a tank of a ship by providing a baffle plate which is installed extending over the whole area in the lateral direction of a wall surface in a position near the top of the wall surface of a tank and projected from the wall surface.

SOLUTION: A baffle plate 2 is not a continuous both-end fixed structure like an upper deck 7 of the tank top part, but projected like a cantilever. Accordingly, even if it is enough reinforced to have high rigidity, it has a spring characteristic to a certain degree, so that the kinetic energy of a liquid can be absorbed by deflection energy due to deflection. Further, a lateral partition 1 is also an elastic body, so that when fluid force is applied to the baffle plate 2, the lateral partition 1 is deformed by moment generated in its root to accumulate deflection energy. This also contributes to absorption of kinetic energy of a liquid. Though a liquid goes over the baffle plate in some size of the baffle plate, the pressure and force applied to the tank top part by the liquid are small.

